REMARKS

I. Claim Amendments

Applicants have amended the claims to better define their invention.

Claim 41 has been amended to recite that the mammal upon which the method of reducing depletion of non-autologous hematopoietic cells is performed "lacks endogenous B- and T-cells capable of depleting said non-autologous hematopoietic cells." Dependent 46 and 47 incorporate the same amendment. Claim 44 has been amended to recite that "the mammal is infected with an immunodeficiency virus." Claim 52 has been amended to make it clear that the non-human mammal "comprises human hematopoietic cells" and that the decreased level of endogenous macrophages is "sufficient to reduce depletion of said human hematopoietic cells" in that mammal. Claim 52 has also been reorganized for clarity. Claim 56 has been amended to recite that method of improving or restoring engraftment efficiency is performed in a mammal that "lacks endogenous B- and T-cells capable of depleting said non-autologous hematopoietic cells." Claim 56 has also been amended to delete the second occurrence of the word "efficiency" and to make clear that the reference to "mammal" in the fourth line of the claim is to the same host mammal that will receive the transplant.

None of these amendments presents new matter.

II. Claim Rejections

In the Advisory Action dated February 3, 2003, the Examiner stated that the claims "do not represent the subject matter indicated as enabled in the above said [May 12, 1999] office action." Specifically, the Examiner asserted that

"claim 41 recites a method wherein the mammal substantially lacks functional endogenous B- and T-cells, however, the indicated office action stated that the mammal lacks functional endogenous B- and T-cells." Applicants assume that claims 41-59, presented upon the filing of this RCE application, therefore remain rejected under 35 U.S.C. §112, first paragraph. Applicants traverse.

Applicants believe that the methods taught in the application have utility and would be effective in reducing depletion of non-autologous hematopoietic cells in a mammal regardless of the functionality of that mammal's T- or B-cells. Applicants have clearly shown that macrophages play a role in the rejection of non-autologous hematopoietic cells. While applicants acknowledge that T- and B-cells also play a role in hematopoietic cell graft rejection, the present invention strongly suggests that ablating a mammal's autologous macrophages would be expected to at least reduce the depletion of non-autologous hematopoietic cells in that mammal. However, in order to expedite prosecution of this application, applicants have amended the claims to recite that the mammal receiving or comprising non-autologous hematopoietic cells "lacks endogenous B- and T-cells capable of depleting said non-autologous hematopoietic cells." This amendment of the claims is without prejudice to applicants' ability to file for and obtain patent protection directed to the deleted subject matter in applications claiming priority from the present application under 35 U.S.C. §120.

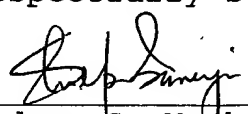
Applicants believe that the phrase "lacks endogenous B- and T-cells capable of depleting said non-autologous hematopoietic cells" is preferable to "lacks functional endogenous B- and T-cells." The latter is language that from

the Advisory Action appears to be allowable to the Examiner. However, it should be noted that as long as a mammal's endogenous B- and T-cells are incapable of depleting non-autologous hematopoietic cells in the mammal, any other functions those leukocytes may possess are irrelevant to the enablement of the present invention. In such a mammal, it is only the endogenous macrophages that are capable of depleting non-autologous hematopoietic cells and thus the methods of the present invention would unambiguously reduce such depletion. The SCID mouse model utilized in applicants' disclosed experiments is a mammal that lacks endogenous B- and T-cells capable of depleting said non-autologous hematopoietic cells. Accordingly, those experiments support this amendment.

In the Advisory Action, the Examiner also asserts that claims 44 and 45 (relating to treating a mammal infected with an immunodeficiency virus), claim 43 (relating to treating a mammal that has a xenogeneic transplant) and other claims "encompass treatment in humans and other animals with [functional] B- and T-cells" and thus "is not enabled." The amendments presented herein obviate these assertions because all the claimed methods recite that the mammal containing the non-autologous hematopoietic cells lacks endogenous B- and T-cells that are capable of depleting those non-autologous cells. As stated above, this feature is fully supported and enabled by the experiments with SCID mice set forth in the application. Applicants believe that these amendments are in accordance with the scope of invention indicated by the Examiner as being enabled and therefore place the pending claims in condition for allowance.

Accordingly, applicants request that the Examiner enter the claim amendments presented herein, consider the foregoing remarks and allow the pending claims to pass to issue.

Respectfully submitted,



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